

Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

1-16. (Canceled)

17. (Currently amended) An apparatus for treating a patient to improve cardiac performance and efficiency of the patient's heart, the apparatus comprising:

at least one electrode adapted to be located in a region associated with nervous tissue in a patient;

means for monitoring one or more physiologic parameters of the patient;

means for automatically applying electrical stimulation via the at least one electrode to improve balance of a neuro-endocrinological system of the patient in response to [[a)] the one or more physiologic parameters signal of the patient; and

means for delivering a pacing therapy to the patient's heart of a type that improves cardiac output, wherein said pacing therapy consists of a cardiac resynchronization therapy; and

means for adjusting the electrical stimulation applied during delivery of the pacing therapy responsive to the one or more physiological parameters of the patient as monitored during delivery of the pacing therapy .

18. (Previously presented) The apparatus of claim 17, wherein the at least one electrode further comprises at least one implanted electrode adapted to be located adjacent a patient's spine.

19. (Currently amended) The apparatus of claim 17, wherein the at least one electrode is adapted to be located external to and in direct contact with a portion of skin of the patient's body ~~so that direct electrical stimulation of the portion of skin occurs when the at least one electrode is energized.~~

20. (Previously presented) The apparatus of claim 17, wherein the at least one electrode is adapted to be located in a subcutaneous space of the patient's body.
21. (Canceled)
22. (Canceled)
23. (Previously presented) The apparatus of claim 17, wherein the at least one electrode is adapted to be located in a region containing a nerve associated with a trunk portion of the body of the patient.
24. (Currently amended) The apparatus of claim ~~[[17]]~~ 18, wherein the at least one electrode is adapted to be located in a region containing at least one thoracic vertebrae.
25. (Currently amended) The apparatus of claim ~~[[17]]~~ 18, wherein the at least one electrode is adapted to be located in a region containing at least one thoracic vertebrae in the range of T1-T12.
26. (Currently amended) The apparatus of claim ~~[[17]]~~ 18, wherein the at least one electrode is adapted to be located in a region containing at least one thoracic nerve bundle.
27. (Currently amended) The apparatus of claim ~~[[17]]~~ 18, wherein the at least one electrode is adapted to be located in a region containing at least one thoracic nerve bundle in the range of T1-T12.
- 28 - 40. (Canceled)

41. (New) The apparatus of claim 17 wherein delivery of the pacing therapy comprises altering a previously delivered pacing therapy in conjunction with applying the electrical stimulation.
42. (New) The apparatus of claim 17 wherein delivery of the pacing therapy comprises initiating delivery of the pacing therapy in conjunction with applying the electrical stimulation.
43. (New) The apparatus of claim 17 wherein the monitoring means comprises a pressure sensor.
44. (New) The apparatus of claim 17 wherein the monitoring means comprises a pressure sensor adapted for a cardiac location.
45. (New) The apparatus of claim 44 wherein the monitoring means comprises means for determining the patient's diastolic pressure.
46. (New) The apparatus of claim 17 wherein the monitoring means comprises means for sensing heart rate.
47. (New) The apparatus of claim 46 wherein the monitoring means comprises means for sensing heart rate variability.
48. (New) An apparatus for treating a patient to improve cardiac performance and efficiency of the patient's heart, the apparatus comprising:
at least one electrode adapted to be located in a region associated with nervous tissue in a patient;
means for monitoring one or more physiologic parameters of the patient;
means for automatically applying electrical stimulation via the at least one electrode in response to the one or more physiologic parameters of the patient; and

means for delivering a pacing therapy to the patient's heart of a type that improves cardiac output; and

means for adjusting the electrical stimulation applied during delivery of the pacing therapy responsive to the one or more physiological parameters of the patient as monitored during delivery of the pacing therapy .

49. (New) The apparatus of claim 48 wherein the monitoring means comprises a pressure sensor.

50. (New) The apparatus of claim 49 wherein the monitoring means comprises a pressure sensor adapted for a cardiac location.

51. (New) The apparatus of claim 50 wherein the monitoring means comprises means for determining the patient's diastolic pressure.

52. (New) The apparatus of claim 48 wherein the monitoring means comprises means for sensing heart rate.

53. (New) The apparatus of claim 52 wherein the monitoring means comprises means for sensing heart rate variability.